BEFORE THE

Federal Communications Commission

WASHINGTON, D.C.

In the Matter of	)	
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200
	)	
Connecticut Department of Public Utility Control	)	
Petition for Rulemaking to Amend the Commission's	)	RM No. 9258
Rule Prohibiting Technology-Specific Or	)	
Service-Specific Area Code Overlays	)	
	)	
Massachusetts Department of Telecommunications	)	
and Energy Petition for Waiver to Implement a	)	NSD File No. L-99-17
Technology-Specific Overlay in the	)	
508, 617, 781, and 978 Area Codes	)	
	)	
California Public Utilities Commission and the People	)	
of the State of California Petition for Waiver to	)	NSD File No. L-99-36
Implement a Technology-Specific or Service-Specific	)	
Area Code	)	

COMMENTS OF
THE CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION

Michael F. Altschul
Vice President, General Counsel

Randall S. Coleman
Vice President for Regulatory Policy and Law

Lolita D. Smith
Staff Counsel

CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION
1250 Connecticut Avenue, N.W., Suite 800
Washington, D.C. 20036
(202) 785-0081

Its Attorneys

July 30, 1999

TABLE OF CONTENTS

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C.

In the Matter of	)	
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200
	)	
Connecticut Department of Public Utility Control	)	
Petition for Rulemaking to Amend the Commission's	)	RM No. 9258
Rule Prohibiting Technology-Specific Or	)	
Service-Specific Area Code Overlays	)	
	)	
Massachusetts Department of Telecommunications	)	
and Energy Petition for Waiver to Implement a	)	NSD File No. L-99-17
Technology-Specific Overlay in the	)	
508, 617, 781, and 978 Area Codes	)	
	)	
California Public Utilities Commission and the People	)	
of the State of California Petition for Waiver to	)	NSD File No. L-99-36
Implement a Technology-Specific or Service-Specific	)	
Area Code	)	

COMMENTS OF
THE CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION

The Cellular Telecommunications Industry Association ("CTIA")[1] hereby submits its Comments in the above captioned proceeding.[2]

---

[1] CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the association covers all Commercial Mobile Radio Service ("CMRS") providers and manufacturers, including 48 of the 50 largest cellular and broadband personal communications service ("PCS") providers. CTIA represents more broadband PCS carriers and more cellular carriers than any other trade association.

[2] In the Matter of Numbering Resource Optimization; Connecticut Department of Public Utility Control Petition for Rulemaking to Amend the Commission's Rule Prohibiting Technology-Specific or Service-Specific Area Code Overlays; Massachusetts Department

I. INTRODUCTION AND SUMMARY

CTIA applauds the Commission's efforts to address numbering optimization issues comprehensively. Telephone numbers are a critical resource -- similar to spectrum -- for wireless carriers. It is essential that all telecommunications carriers use these limited resources efficiently. As the Commission has repeatedly enunciated, no entity -- whether carrier or regulator -- should, through discriminatory practices or otherwise, impair the efficient utilization of telephone numbers. Nor should any entity impair the timely distribution of such numbers to any carrier with a demonstrated need for additional numbering resources.

CTIA and its members pledge their full commitment to foster the Commission's goals for this proceeding to: (1) minimize the negative impact on consumers; (2) ensure sufficient access to numbering resources for all carriers; (3) avoid or delay exhaust or expansion of the North American Numbering Plan ("NANP"); (4) impose the least societal cost possible, in a competitively neutral manner, while maximizing benefits; (5) ensure that no class of carrier or consumer is unduly favored or disfavored; and (6) minimize incentives to hoard numbers.

Unfortunately, the Commission's goals of promoting efficient and nondiscriminatory use of scarce numbering resources is at odds with those objectives enumerated by the states. Many states have expressed a singular desire to preserve local calling arrangements, as evidenced by their numerous requests to the Commission for the authority to adopt discriminatory numbering

---

of Telecommunications and Energy Petition for Waiver to Implement A Technology-Specific Overlay in the 508, 617, 781, and 978 Area Codes; California Public Utilities Commission and the People of the State of California Petition for Waiver to Implement a Technology-Specific or Service-Specific Area Code, *Notice of Proposed RuleMaking*, CC Docket No. 99-200, RM No. 9258, NSD File No. L-99-17, NSD File No. L-99-36, FCC 99-122 (rel. June 2, 1999) ("Notice").

regimes, such as service specific area codes. The states' fundamental unwillingness to administer timely area code relief, and their insistence on adopting inherently inefficient and discriminatory numbering allocation methods, is effectively hampering the Commission's goals in this proceeding. Indeed, it would be penny wise and pound foolish for the Commission to focus on carriers who strand numbering resources by the thousands, and ignore the stranding of millions of numbers due to parochial state decisions.

The time has come for the Commission to assert its plenary authority over numbering administration granted to it by Congress to promote consumer welfare. The Commission must recognize and address this tension between Federal and state interests in a manner that preserves efficiency and promotes nondiscriminatory treatment. To do otherwise risks premature exhaust of the NANP.

In achieving its goal of efficient utilization of numbers, the Commission needs to establish a national benchmark for the telecommunications industry. Yet this need not be a one-size-fits-all solution. CTIA proposes that in jeopardy areas, the Commission adopt a utilization threshold that each industry segment should be required to meet. The Commission should leave it to carriers to determine how best to achieve the utilization rate. This should best ensure a cost-effective allocation of precious numbering resources.

In response to specific Commission proposals CTIA recommends the following:

- **ADMINISTRATIVE MEASURES:** The Commission should establish flexible, national guidelines to be administered by the North American Numbering Plan Administrator ("NANPA") with rights of review by the Commission. In jeopardy areas, the Commission should adopt minimum utilization thresholds within a given rate center that account for seasonal variations and other legitimate business needs. The Commission should rely when possible upon the efforts of industry numbering bodies in developing definitions, and reporting and auditing procedures. Carriers should have the opportunity to choose their own numbering optimization strategies, and the Commission should impose solutions only if the carrier fails to meet its utilization

threshold. Such results-oriented regulation should minimize burdens on both the Commission and carriers while achieving efficient utilization of numbering resources.

- **NON-LNP BASED SOLUTIONS: RATE CENTER CONSOLIDATION:** To encourage rate center consolidation, the Commission should: (1) reaffirm that states should utilize their existing jurisdiction over rate center consolidation and area code relief and such jurisdiction should not be expanded; and (2) encourage the continued availability of extended local calling areas ("ELCAs") for CMRS carriers.

- **LNP-BASED SOLUTIONS: NUMBER POOLING:** The Commission should reject proposals to subject wireless carriers prematurely to expensive, burdensome obligations such as number pooling. The Commission has already determined that CMRS providers need not deploy the number portability technology necessary for pooling until November 2002. To the extent that the Commission were to adopt a national pooling strategy, the very marginal benefits of including wireless would be exceeded by the costs to consumers. This is true especially in rural markets outside the largest 100 MSAs. Moreover, CTIA questions several presumptions established in the NANP exhaust model regarding the benefits to conservation associated with including wireless carriers in number pooling.

- **AREA CODE RELIEF MEASURES:** The Commission should reaffirm its decision to prohibit states from adopting technology/service specific area codes. Technology specific area codes are a step back in maximizing numbering resources because they: (1) inefficiently utilize NPA codes by possibly stranding hundreds of NXX codes available to only one service; (2) have failed to stem the tide of number exhaust in the one instance in which they were utilized; and (3) are anticompetitive.

II. THE COMMISSION SHOULD ADOPT FLEXIBLE, EFFICIENT, NATIONAL NUMBERING OPTIMIZATION ADMINISTRATIVE GUIDELINES, INCLUDING MINIMUM UTILIZATION THRESHOLDS.

The Commission's decision to adopt administrative measures to promote number optimization[3] is sound. Since 1995, the Commission has observed certain fundamental principles regarding numbering administration that, while more true today than ever before, are jeopardized by the actions of certain states. Specifically, the Commission has made clear that "numbering administration should: (1) seek to facilitate entry into the communications marketplace by making

---

[3] Id. at ¶¶ 36-38.

numbering resources available on an efficient and timely basis; (2) not unduly favor or disadvantage any particular industry segment or group of consumers; and (3) not unduly favor one technology over another."[4] The Commission has also recognized the competitive significance of non-discriminatory numbering administration and rejected state proposals to implement wireless only area codes.[5]

Recently, the Commission has "noted that a uniform, nationwide system of numbering . . . is essential to the efficient delivery of telecommunications services in the United States."[6] Through this Notice, the Commission has correctly held fast to its basic principles, proposing nationwide, efficient mechanisms for numbering administration. The current process, however, can be refined in several ways, as discussed below, "to inject a greater degree of discipline into the process of allocating and administering numbering resources."[7]

---

4 Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, et. al., *Second Report and Order and Memorandum Opinion and Order*, CC Docket Nos. 96-98, 95-185, NSD File No. 96-8, CC Docket No. 92-237, IAD File No. 94-102, 11 FCC Rcd 19392, ¶ 281 (1996) ("Second Report and Order").

5 Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech - Illinois, *Declaratory Ruling and Order*, IAD File No. 94-102, 10 FCC Rcd 4596 (1995) ("Ameritech Order").

6 Petition for Declaratory Ruling and Request for Expedited Action on the July 15, 1997 Order of the Pennsylvania Public Utilities Commission Regarding Area Codes 412, 610, 215, and 717, *Memorandum Opinion and Order and Order on Reconsideration*, CC Docket No. 96-98, NSD File No. L-97-42, 13 FCC Rcd 19009, ¶ 10 (1998) ("Pennsylvania Order").

7 Notice at ¶ 37.

A. National Administrative Guidelines -- As Opposed To Formal Rules -- Generally Should Be More Efficient.

1. Numbering Issues Inherently Require Comprehensive, National Treatment.

The Commission's previous determination that "a nationwide, uniform system of numbering is essential to the efficient delivery of telecommunications services in the United States"[8] is critically important. As it has noted:

> [t]he Commission, the state commissions, and the industry should work together to bring about as quickly as possible national methods to conserve and promote efficient use of numbers that do not undermine that uniform system of numbering. Such attempts, however, cannot be made on a piecemeal basis without jeopardizing telecommunications services throughout the country. Substantial social and economic costs would result if the uniformity of the [NANP] were compromised by states imposing varying and inconsistent regimes for number conservation and area code relief. Such inconsistency could interfere with, or even prevent, the routing of calls in the United States. The lack of uniformity also could hamper the industry's efforts to forecast and plan properly for exhaust of the [NANP], and therefore ultimately could accelerate unnecessarily the introduction of a new nationwide numbering plan. . . . [This] would mean costly network upgrades to accommodate a new dialing scheme that would be confusing to consumers.[9]

Simply stated, numbering issues transcend geographic boundaries; the need to conserve the NANP may at times conflict with a particular state's parochial interests. Moreover, regulatory actions that affect the supply of numbering resources are inextricably interrelated -- area code jeopardy does not occur in a vacuum. Thus, if one state attempts to forestall or prevent jeopardy, its actions will have repercussions for consumers and carriers in other states. The sheer number

---

[8] Pennsylvania Order at ¶ 21.

[9] Id. (citations omitted).

of individual requests by various state regulatory agencies for numbering administration authority, coupled by the diversity of proposed solutions, illustrates the need for a national framework. Given the interdependency of government action in this case, a national plan to optimize numbers is essential as a matter of policy and absolutely necessary to execute the Commission's exclusive numbering authority under Section 251(e).[10]

2. Guidelines Provide Needed Flexibility To Carriers.

Flexibility within the national framework is also necessary. The Commission should establish flexible guidelines to be administered by NANPA with rights of review by the Commission.

Guidelines -- as opposed to more rigid rules -- are sufficient to ensure the optimization of numbering resources without imposing excessive regulatory burdens or costs. Given the diversity of the telecommunications carrier community, a one-size-fits-all approach to numbering optimization is sure to fail. With a flexible scheme embodied in enforceable guidelines, carriers are not subject to the lengthy delays caused by administrative procedure considerations and other burdens typically associated with formal rules.[11] The states' reluctance to grant needed resources to rapidly growing sectors of the industry because of their desire to postpone area code relief is not an appropriate reason for denying a carrier timely access to an essential component of its service offering -- especially in markets as competitive as CMRS (where a potential customer typically has several competitive alternatives).

---

[10] 47 U.S.C. § 251(e).

[11] At the same time, carriers' rights are preserved by providing recourse to the Commission to review actions taken by NANPA.

It is absolutely essential that any guidelines the Commission adopts promptly accommodate carriers' need for numbering resources. Densely populated areas with high numbering demands will face jeopardy and the need for stringent conservation measures sooner and more frequently than other markets. Wireless carriers who operate in such markets may use, for example, a 10,000 block of numbers in 10 weeks. These carriers have a different, compelling need for immediate access to numbers and different utilization than carriers operating in other markets. The Commission's national guidelines must be tailored to deal with these different realities to ensure the prompt grant of numbering resources upon a sufficient showing of need.

The Commission must not lose sight of the fact that numbers are a public resource. The government's role in ensuring the efficient distribution of this public resource is especially critical, as is the requirement to treat all telecommunications carriers that need access to numbers fairly and equally.

3. The National Guidelines Should Target Problem Areas In Which Jeopardy Has Been Declared.

To ensure efficiency, the Commission must tailor its national guidelines in proportion to the localized need for numbering resources. The most stringent measures should be applied in areas where the existing NPA (or NPAs) have been declared to be in "jeopardy" pursuant to industry guidelines.

The procedures associated with ensuring that carriers use their numbers efficiently will convey certain costs, including direct costs associated with compliance and enforcement.[12] For

---

[12] Extensive reporting requirements that apply in non-jeopardy areas have the ability to overburden both NANPA (by requiring it to oversee and perform audits in non-problem areas) and carriers (by imposing additional unnecessary compliance costs).

this reason, it does not make sense to apply the guidelines in all markets.[13] To illustrate, in many rural and thinly-populated areas, existing numbering resources and technology-neutral measures should be more than adequate to ensure the continued availability of numbering resources because such areas have fewer requests for telecommunications services and are in no imminent danger of exhausting numbering resources. As a matter of course, non-jeopardy areas should be excluded from the most burdensome of the Commission's regulatory requirements.

B. The Commission Should Adopt Reasonable Utilization Thresholds Measured At Rate Centers.

As emphasized throughout the Notice, among the Commission's goals in this proceeding is the objective of ensuring the efficient utilization of numbers. This does not mean that the Commission must impose a one-size-fits-all remedy. Rather, to achieve efficiency, carriers should be held to a benchmark -- a uniform utilization rate applicable to every telecommunications carrier. Carriers should be required to fill to the utilization rate employing whatever solution is most cost-effective to them.

The minimum utilization thresholds should be measured at the rate center level. The rate center level is most appropriate because of the large variation in service areas covered by NPAs, and because different carriers have different service areas (i.e., urban only, rural, or mixed).[14] CTIA proposes that a carrier would be entitled to obtain additional numbering resources in a

---

[13] While CTIA advocates the adoption of guidelines that are national in scope, it does not believe that they should automatically apply to all markets, just in those NPAs which have been declared in jeopardy by NANPA.

[14] Moreover, a rate center based system will provide states a basis for measuring the efficiency of rate center consolidation.

specific rate center when its utilization of numbering resources in that rate center exceeds a specific threshold.

Moreover, the Commission's utilization thresholds should be reasonable. They should be sufficiently tailored to adapt to seasonal variations and marketing initiatives developed by carriers. Establishing an inflexible percentage benchmark or trigger without a predictive element to accommodate CMRS carriers' seasonal growth is not reconcilable with consumer demand for wireless services or the way carriers do business. Consumer demand for wireless services ebbs and flows at different times during the year. For example, the holiday season is a peak time for wireless services. The rather "lumpy" sales cycles experienced by wireless carriers requires a flexible, rapid accommodation.

1. The Minimum Utilization Threshold Should Be 60% And Increase To 70% Over Time.

The purpose of this proceeding is to adopt efficient mechanisms for administering numbering resources. By adopting results oriented, minimum utilization benchmarks, the Commission would achieve these goals while avoiding the imposition of burdensome regulations. CTIA proposes that in a jeopardy situation, a telecommunications carrier may request numbering resources for a given rate center when at least 60% of its total numbers are "unavailable." Effective one year after adoption of a final order, the minimum rate center utilization rate should increase to 65%, and effective one year later it should increase to 70%. For purposes of meeting the utilization threshold, telecommunications carriers should determine utilization by looking at data from "mature" NXX codes.[15]

---

[15] Mature NXX codes are those assigned to, and available for use by, a carrier for at least 90 days. Thus, NXX codes held fewer than 90 days and NXX codes due to be received

Utilization thresholds should not apply to a carrier's first request for NXX codes when it establishes its initial presence in a rate center.[16] These requests are not made lightly and, unless there is a history of wrong doing, no carrier should be prevented from offering its competitive services. Under these circumstances, a carrier should be required to demonstrate a *bona fide* business need. For example, definitive plans to expand existing geographic service areas or to offer new service may be considered a *bona fide* business need.

In addition, CTIA believes that a carrier should be able to request additional numbering resources for a given rate center, even if it has not reached the minimum utilization rate, if it has a *bona fide* need for numbering resources based on historical activation data or other credible evidence. CTIA proposes that carriers demonstrate need by means of a showing satisfactory to NANPA. Carriers may also request numbering resources in a given rate center for "special services" that require separate blocks of numbers.[17]

Finally, it is CTIA's long-standing belief that to ensure non-discriminatory treatment, all carriers, including wireless carriers, should be held to the same utilization thresholds. While wireless carriers should be required to be as efficient in their utilization as any other industry segment, they necessarily should not be subject to more stringent thresholds. Requiring a

---

within 90 days of the utilization calculation should not be included in a carrier's utilization rate. These should be defined as newly acquired NXXs. See Notice at ¶ 65.

16 To minimize the impact of this policy, carriers that are participating in any number pooling regimes should only receive an initial allotment of numbers in 1000-unit blocks. Other carriers should continue to receive numbers in 10,000-unit blocks.

17 Special CMRS services should include, though not be limited to, FEMA Priority codes, prepaid services, calling party pays, and other special services. Utilization of numbering resources allocated for special services should be calculated and reported separately.

different and higher efficiency level for wireless carriers would place CMRS providers closer than other carriers to the position of having no numbers before they could request new numbers. Such a situation not only poses a competitive disadvantage due to uneven regulation, but also violates the Commission's most basic policies concerning numbering administration. Therefore, all telecommunications carriers should be held to the same standard.

2. The Commission Should Establish Procedures For Carriers To Make Utilization Threshold Demonstrations.

As a general principle, the Commission should rely to the greatest extent possible upon the efforts of neutral third-party industry numbering bodies such as NANPA and the North American Numbering Council ("NANC") in developing definitions, and reporting and auditing procedures associated with utilization thresholds.

The Commission's definitions should be sufficiently flexible to account for the legitimate business needs of carriers. In particular, CTIA's members have identified an inconsistency in the Commission's terminology that needs correction. Specifically, the Commission's discussion about reclamation and reuse of unused NXX blocks reflects a misunderstanding of the use and definition of the terms "active" and "in service."[18] This may be due in part to a lack of clarity in the industry's own guidelines. In essence, the industry's guidelines should be clarified so that six months after a code has been classified "active," it must be put "in service."

According to current industry guidelines, the definition of an "in service" NXX code is an active code in which specific subscribers or services are utilizing assigned telephone numbers.

---

[18] Notice at ¶¶ 96-98.

When an NXX meets this definition, a carrier is required to provide a Part 4 form to the code administrator, notifying that the NXX is "in service."[19]

Correspondingly, an "active" code is defined as a code formally assigned by the CO Code Administrator and implemented in the public switched telephone network ("PSTN") for specific routing or rating requirements. At this time, the carrier has transmitted the local routing information to the LERG. An "active" code is not "in service" until the first subscriber is actually assigned. The Guidelines allow up to 6 months for certification of "in service" status after a code has been designated "active."[20] The requirement to file a Part 4 form within 6 months of a code becoming "active" should aid NANPA in triggering a reclamation process.

Given this distinction between an "active" code and an "in service" code, it does not appear that further clarification, as proposed by the Commission, is required. Rather, the industry's guidelines should be revised to remove any confusion.

Consonant with a utilization threshold is the need to verify the numbers reported to NANPA. CTIA believes that audits should be conducted, but only under certain circumstances. Purely random audits serve no legitimate purpose in increasing efficient utilization of numbers and may impose excessive costs on the auditor. Carriers should only be subject to audits of utilization, forecast data, and reporting methods where: (1) jeopardy has been declared by

---

19 The date identified in the local exchange routing guide ("LERG") as the "effective" date is the date the carrier anticipates the code will be needed for service. Thus, it is the date that all network translations by carriers should be done in order to ensure completion of calls to that code for testing, or for when the first customer is assigned.

20 This delay is necessary because it allows for actual delays in switch turn-up in the case of a new switch, and/or for the first actual assignment to a subscriber, given that a carrier can retain a 12 month (under normal circumstances) or a 6 month (in jeopardy circumstances) inventory of numbers.

NANPA; or (2) a carrier's request for numbering resources substantially alters NANPA's exhaust projections. To the extent possible, audit procedures should be established by the NANC and overseen by NANPA.

For the audit process to be effective, NANPA needs the authority to prevent further abuse of the process. Thus, if NANPA finds evidence of noncompliance as the result of its audit of a carrier's utilization records, it should have authority to withhold numbering resources pursuant to Commission guidelines.[21] Audited parties, though, need to have recourse to object to the audit results. To ensure fairness, NANPA should be required to forward such evidence to the Commission. The Commission should establish expedited (streamlined) procedures for *de novo* review of the evidence by the Wireless Telecommunications and Common Carrier Bureaus. Carriers should be permitted to submit rebuttal evidence. Based on its findings, the Commission may direct NANPA to continue withholding the provision of numbering resources to the non-compliant carrier.

To enhance efficiency and minimize cost, the Commission should require all telecommunications carriers to submit their reporting information directly to NANPA. There should be no separate obligation to report such data to the Commission or to states. By designating one centralized body to act as the sole repository for information, the Commission would minimize reporting costs and ensure the accuracy of the underlying data. NANPA would

---

[21] The Commission should prescribe guidelines by which NANPA must immediately grant numbering resources to compliant carriers upon request and withhold numbering resources temporarily from a non-compliant carrier.

also serve as the sole source for any Commission or state inquiry regarding numbering optimization issues or statistics.

The Commission's guidelines must also recognize the confidential and proprietary nature of carrier utilization data and limit access accordingly. Carriers have competitive and investment-related reasons for keeping such data confidential.[22] Simply stated, public release of this type of information may have negative market consequences. While states should be permitted access to industry or market data in aggregate form as a matter of course, they should be required to sign an enforceable non-disclosure agreement before receiving carrier-specific utilization rate data. Consistent with this, all carrier-submitted utilization data should be treated as confidential and proprietary business information by NANPA and by the Commission.

C. Carriers Should Have The Flexibility To Choose Their Own Method(s) Of Numbering Optimization Compliance.

To preserve flexibility, and to ensure efficient optimization measures, the Commission should permit carriers or industry to determine how best to meet utilization thresholds. Carriers should have the opportunity to choose their own numbering optimization strategy. By permitting carriers to draw on as many different measures as needed to match the different characteristics and capabilities of the various industry segments that depend on numbering resources, the Commission will optimize the use of scarce numbering resources. The goal is not a one-size-fits-all solution, but rather the most efficient use of the numbering resources that come within the Commission's jurisdiction.

---

22 For example, it may be commercially valuable for a potential competitor to learn how many numbers a "rival" carrier has in a given market or rate center. Such information can reveal a carrier's plans for expansion or its target market(s).

The Commission's responsibilities, though, should not end with the establishment of a national framework for numbering distribution. The Commission must maintain a supervisory role to ensure that there are no regulatory barriers to a carrier's choice of compliance methods. Specifically, it should establish strict guidelines to ensure the timeliness of state activities related to area code relief and to address their impact on carriers' ability to comply with the national guidelines. Moreover, the Commission must, in the exercise of its plenary authority over numbering administration, ensure the immediate availability of numbering resources to compliant carriers.

As explained further below, in removing obstacles to numbering efficiency, the Commission should oversee the exercise of the states' limited numbering jurisdiction to ensure the efficient utilization of numbering resources. If the Commission is to be successful in tailoring relief to the reasons for the inefficient use of numbering resources, it must address the delicate balance between state and Federal interests.

III. THE COMMISSION SHOULD ENCOURAGE TECHNOLOGY-NEUTRAL NUMBERING OPTIMIZATION MEASURES.

In addition to the administrative measures that will result in more efficient utilization of numbering resources, the Commission must take steps to address the numbering exhaust problem at its source by reducing artificial demand for telephone numbers. The recent increase in telephone number demand is generally the result of two phenomena -- one of which is the direct result of competition and the other a by-product of the former monopoly regulatory regime. First, the explosive growth of telecommunications services that rely on telephone numbers, in part due to the passage of the 1996 Telecommunications Act, has caused telecommunications carriers to demand more telephone numbers to meet the needs of their customers. This is not an undesirable

event. In fact, Commission efforts in this proceeding should be tailored so as not to adversely affect this legitimate demand for numbers. On the other hand, the second reason for the numbering exhaust crisis is the artificial demand for telephone numbers that, although indirectly may be influenced by the proliferation of telecommunications services, is the result of inefficient and outdated regulations that require carriers to take numbers in excess of those requested by their customers.

It is almost indisputable that the telecommunications industry is largely in a numbering crisis because of the current inefficiency in the allocation of telephone numbers, and not because there are not enough numbers to accommodate consumer needs. It is not the use of telephone numbers *per se*, but rather the stranding of them by wireline carriers who are confined by the boundaries of rate centers that threatens to exhaust the NANP.[23] The Commission therefore, should take steps that are directed at alleviating this inefficiency by reducing artificial carrier demand for numbers in a technology-neutral fashion. That is, Commission policies should distinguish between the increased demand for numbers that is the natural result of the growth of telecommunications services, such as CMRS, and the demand that is the result of inefficient numbering allocation.

While no particular party should be blamed for the present crisis, certain state regulatory regimes have fostered the inefficient allocation of telephone numbers. If the Commission expects to be successful in tailoring solutions for the inefficient use of numbering resources, it will have to

---

[23] See Notice at ¶ 21 (noting that fill rates may be as low as 5.7% for some carriers and that generally a "relatively low percentage of individual telephone numbers are actually assigned to customers throughout the NANP").

address the delicate balance between state and Federal regulatory interests. For example, rate center boundaries and the wireline local calling areas associated with ILEC rate centers are a product of the states' regulatory authority. Similarly, state commissions have authority over a wireline carriers' provision of Extended Local Calling Areas ("ELCAs"). The Commission should ensure that state commissions take significant strides pursuant to their existing authority toward reducing artificial telephone number demand.

A. The Commission Should Promote Rate Center Consolidation.

Among the non-administrative measures the Commission has proposed to stem inefficient demand for telephone numbers, the Commission has correctly identified "rate center consolidation [as] a vitally important long-term measure to optimize the utilization of numbering resources [that] should be implemented to the greatest extent possible."[24] By expanding the geographic area of a local call, rate center consolidation, along with ELCAs (discussed below) offer two benefits: (1) they can ease the crisis in existing jeopardy situations, and (2) result in more efficient distribution of numbers on a going-forward basis. Not only are they effective solutions, but the fact that these remedies are targeted at inefficient numbering allocation in a technology-neutral manner suggests that implementing these solutions should be the primary objective of the Commission and of state regulatory agencies.

The single most wasteful aspect in an already inefficient numbering scheme may be the requirement that CLECs receive a block of telephone numbers in each rate center, regardless

---

[24] Notice at ¶ 116.

of the number of customers they may serve in that area.[25] This demand for telephone numbers is not driven by consumers, or even a technological requirement of the CLEC network. Rather, it is the result of a dated regulatory construct,[26] which must yield to the benefits of allocating numbers more efficiently.[27] In many localities where numbering resources are scarce, i.e., where jeopardy has been declared or forecasted, wireline carriers' reliance on rate centers has resulted in the inefficient allocation of numbering resources.

As the Commission itself recognized in the Notice, the primary solution is rate center consolidation. By reducing the number of rate centers in a given geographic area, a carrier can utilize its existing allocation of telephone numbers over a greater region, thereby reducing future demand for additional numbers within an existing NPA facing exhaust.[28] Additionally, some

---

25 Wireless carriers obtain numbering resources from only a small percentage of the nation's rate centers -- approximately 10%. Rate center consolidation will have a more direct impact on CLECs' utilization of numbers.

26 CMRS licensees serve geographic areas that commonly cross state boundaries and are much larger than a LEC rate center. CMRS service areas and networks were not engineered to respect wireline rate centers, as there is no regulatory, technical, or business reason for doing so. In fact, the mobility of wireless services makes the smaller calling areas defined by rate centers illogical. As the Commission recognized in adopting MTA and BTA boundaries for PCS licensees, wireless customers benefit from these larger local calling areas that reflect the needs of mobile users.

27 See "Where Have All The Numbers Gone; Long-term Area Code Relief Policies and the Need for Short-term Reform," Economics and Technology, Inc., March 1998, at 26-27 ("Fundamental changes should be made in the granularity with which individual rating areas (exchanges or rate centers) are presently defined. A consequence of [rate center consolidation] would likely be an expansion of certain local calling areas and/or the elimination of some existing distance sensitive charges. These types of local pricing revisions are, however, fully justified by the cost structure of modern telecommunications networks, and are long overdue for reasons unrelated to numbering issues.") ("Where Have All The Numbers Gone").

28 See Notice at ¶ 113.

carriers may have utilization thresholds that would permit them to return unused telephone numbers to the administrator. In newly adopted NPAs, the benefits of rate center consolidation are even more evident. Specifically, each carrier operating in that region will require fewer NXX codes to identify its unique switch.

The benefits of rate center consolidation are easily quantified. For example, by reducing the number of rate centers in a major metropolitan area from four to one, a state commission would effectively wipe out 75 percent of the artificial CLEC demand for telephone numbers on a going-forward basis.[29] In Minneapolis and St. Paul, 21 rate centers were recently consolidated into one central office code. As a result, 200,000 less NXX codes were needed for each CLEC offering service in that market.[30] Rate center consolidation can be done quickly (i.e., no additional regulatory authority is necessary), in a non-discriminatory fashion, in any market, without deploying additional technology.

Thus, the issue before the Commission is not whether to promote rate center consolidation, but how to prompt the states to do so. Because it offers the most effective means of alleviating artificial demand for telephone numbers, the Commission should adopt a policy encouraging states to invoke their existing authority to order rate center consolidation -- before

---

29 Many communities have significantly more rate centers than four. Boston, for example, maintains nine separate rate centers. In Texas' five largest cities, there existed 108 rate centers, which were recently reduced through consolidation to 31. See Number Resource Optimization Working Group Modified Report to the North American Numbering Council on Number Optimization Methods, at 19, n.3 (Oct. 20, 1998) ("NANC Report").

30 See U S WEST *ex parte*, CC Docket No. 99-200 (filed July 8, 1999) (Attachment entering into the record a Minnesota Public Utility Commission ("MPUC") order issued December 15, 1998, In the Matter of a Relief Plan for the Exhaust of the 612 Area Code, at 13) ("U S WEST *ex parte*").

number pooling is instituted.[31] To date, state commissions appear to be expending more effort requesting waivers from the Commission to implement number pooling than they are expending investigating the benefits of rate center consolidation.[32] The Commission should deny such requests until a state regulatory agency has provided a good faith demonstration that it has either (1) implemented to the greatest extent possible rate center consolidation, or (2) rate center consolidation is completely infeasible.[33]

Moreover, the efficiencies that are realized through pooling would only be enhanced by rate center consolidation.[34] In fact, without first requiring rate center consolidation, pooling is less effective because CLECs continue to operate in a regime that requires them to inefficiently request telephone numbers at a rate that exceeds their customers' demand. Similarly, ordering rate center consolidation after pooling has been implemented will not often change the fact that a

---

31 See Notice at ¶ 117 (noting that states presently possess the authority to order rate center consolidation).

32 See Common Carrier Bureau Seeks Comment on State Utility Commission Requests for Additional Authority to Implement Telecommunications Numbering Conservation Mechanisms, NSD File No. L-98-136, *et al.*, Public Notice, DA 99-1198, at 2 (rel. June 22, 1999) (noting that "[a]mong other things, the state commissions have sought authority to implement number pooling trials in their states . . . to adopt number-assignment standards . . . [and] to maintain rationing of NXX codes."). Thousands-block number pooling for LNP capable carriers is unrelated to rate center consolidation.

33 This would not require a state to consolidate each and every rate center or to take actions that would irreparably harm the maintenance of affordable local rates. Rather, incremental consolidation, whether from 100 to 65 or from 15 to 10 rate centers would yield demonstrable efficiencies. The Commission need not impinge upon a state public utility's rate-setting authority or other regulatory matters within its province to achieve the legitimate national goal of increased efficiency in numbering administration.

34 Notice at ¶ 151.

carrier had already been assigned a block of numbers -- albeit a smaller block -- that it may not have needed but for the requirement that it take numbers in each rate center.

The Commission notes that there may be some "disruptive impacts" resulting from rate center consolidation, including possible decreases in local revenue as a result of increased local calling scopes and increased customer confusion.[35] Rate center consolidation, however, has already proven to be a workable and effective solution.[36] Moreover, to the extent that technological developments are making distance sensitive pricing on the wireline network anachronous,[37] any reduction in revenues that may result from the decreased number of intrastate toll calls would likely be matched by a reduction in wireline carriers' costs to provide extended local calling services. Finally, whatever costs are associated with rate center consolidation, they will likely pale in comparison to the financial and societal costs associated with exhaustion of the NANP.[38]

---

35 See id. at ¶ 114.

36 See NANC Report at 1.5.1 (noting that in San Antonio, Texas, a proposal to reduce the number of rate centers from 29 to 1 would extend the life of the existing NPA, already in jeopardy, by two years).

37 In Colorado, U S WEST dropped a request seeking $22 million to cover, among other things, rate center consolidation. "U S West Submits $84 Million Annual Refund Plan in Colorado," Washington Telecom Newswire, Jan. 11, 1999.

38 See "Where Have All The Numbers Gone" at 27 ("Expansion of calling areas and elimination of distance-based charges may have small negative revenue impacts on the incumbent LEC, but these pale in magnitude to the huge tangible and intangible costs associated with the introduction of new area codes."); see also id. at 27, n.33 (noting that rate center consolidation does not necessarily have pricing or revenue consequences).

B. States Should Be Encouraged To Maintain Extended Local Calling Areas For CMRS Providers.

Similarly, the availability of ELCAs to CMRS providers will ensure that such carriers continue to utilize numbers on an efficient basis. Although not discussed in detail in the Notice, the Commission should also address means of preserving ELCAs.

ELCAs are technical arrangements that extend a local calling area to a predetermined, fixed, geographic area such as a LATA. ELCAs are typically based on contractual negotiations between CMRS carriers and ILECs and cost virtually nothing to implement. They permit land-line telephone customers to place calls to CMRS subscribers without paying toll charges because the CMRS provider pays the landline carrier instead. ELCAs enable wireless carriers to use their allocation of numbers more efficiently by permitting CMRS providers to fully utilize each NXX code over a wider geographic area before seeking assignment of additional numbering resources. Where a CMRS provider and the ILEC have established an ELCA, the CMRS provider no longer needs NXX codes in each wireline rate center because all calls within the ELCA are treated as local to the caller.[39] As a result, wireless carriers fully utilize their numbers consistent with their own network architecture as opposed to conforming demand to that of the landline carriers.

The Commission should preserve the availability of ELCAs as an option for CMRS. The Commission recognized in the Notice that "wireless carriers offer larger calling areas and thus require fewer NXX codes for the wireless service, [but] they often must request as many NXX codes as are required to permit wireless customers to be called by wireline customers on a local

---

[39] It is for this reason that CMRS providers are able to maintain a presence in a few rate centers while offering local service throughout an extended area.

basis."[40] ELCAs address this problem by reducing the number of NXX codes a wireless carrier would have to request to maintain a local calling area.

Some state commissions, however, have recently issued opinions that threaten the continued availability of ELCAs in those states. In comments previously filed with the Commission, CTIA explained that both Michigan[41] and Wisconsin have eliminated the ILECs' provision ELCAs.[42] This has forced wireless carriers to obtain additional NXX codes to minimize charges to wireline callers, further aggravating a jeopardy situation in the 616 and 414 NPAs. The Commission must discourage state commissions from adopting policies that result in the inefficient utilization of numbering resources. The alternative -- permitting state commissions to create jeopardy situations through, for example, the elimination of contractually established ELCAs -- is problematic in light of the present numbering crisis.

Finally, the Commission must continue to monitor state actions taken pursuant to the authority delegated by the Commission to implement area code relief measures.[43] The Commission must guard against states exercising their authority to the detriment of efficient numbering administration. In Minnesota, for instance, U S WEST reports that the MPUC has instituted proceedings to establish four, and potentially five NPA codes -- for a population of 2.5

---

40 Notice at ¶ 112.

41 See In the Matter of the Complaint of Centennial Cellular Corporation Against Ameritech Michigan, Case No. U-11620, *Opinion and Order*, Before the Michigan Public Service Commission (rel. Aug. 5, 1998).

42 See CTIA Comments in The North American Numbering Council Report Concerning Number Pooling and Other Optimization Measures, NSD File No. L-98-134, at 8 (filed Dec. 21, 1998).

43 See generally Pennsylvania Order.

million.[44] This state regulatory action establishes nearly 30 million telephone numbers to serve the Twin Cities metropolitan area. The MPUC's decision was predicated upon the desire to preserve 7-digit dialing, notwithstanding the fact that its "solution" will (1) require all callers, even some callers within the Twin Cities, to remember four different area codes depending upon which part of the city they are calling (e.g., Minneapolis core, southwest suburbs, northwest suburbs), and (2) result in inefficient code duplication because of the immediate need to duplicate NXXs in each new area code. State decisions such as this generally are not based on sound optimization policies. The Commission should ensure that in exercising their lawful authority, states do not contribute unnecessarily in accelerating NPA exhaust in this fashion. Indeed, it would be penny wise and pound foolish for the Commission to focus on how carriers strand numbering resources by the thousands and ignore the stranding of numbering resources by the millions due to inefficient state decisions.

IV. THE COMMISSION SHOULD REJECT OPTIMIZATION MEASURES THAT REQUIRE CMRS CARRIERS PREMATURELY TO IMPLEMENT LNP.

Number pooling is an administrative measure specifically designed to remedy inefficient utilization of telephone numbers by carriers with a reduced demand for numbering resources. It targets those carriers that use far less than the 10,000 numbers typically assigned in an NXX block. Necessarily, if a carrier such as a CMRS provider uses its numbers in an NXX block efficiently, there is no basis to impose number pooling. In that case, there would be no need to ration numbers in 1000-number blocks. Rather, the benefits associated with number pooling would be minimal, or, more likely, non-existent. As the Commission specifically declares,

---

[44] U S WEST *ex parte* (Attachment by Ken Saville, Elridge Stafford, Mike Whaley, U S WEST, "Minnesota '612' NPA Relief Plan," at 2-8 (July 7, 1999)).

"[o]rdering [number] pooling in an area should be guided by the decision that the benefits of doing so will outweigh the costs."[45] Thus, as a practical matter, number pooling is inappropriate as applied to CMRS carriers.

In addition, requiring CMRS carriers to participate in number pooling violates the Commission's policy goals in this proceeding to (1) minimize societal costs in a technology neutral manner and (2) not unduly disfavor a class of carriers.[46] The Commission may ensure the efficient utilization of numbering resources -- and the preservation of the NANP -- without resorting to discriminatory, non-technology neutral solutions. The Commission should refrain from requiring CMRS carriers to engage in 1000-block number pooling. Because number pooling is dependent on the availability of local number portability ("LNP"), CMRS carriers should not be obligated to participate. CTIA does not object to LNP-capable carriers participation in number pooling so long as CMRS providers continue to receive numbers in NXX blocks, similar to those number pooling trials already taking place in some states.

A. Number Pooling Is Inappropriate For CMRS Providers, And Unduly Burdensome For CMRS Subscribers.

In the Notice, the Commission seeks comment on whether it should accelerate CMRS number portability obligations in light of optimization efforts that may include number pooling.[47]

---

45 Notice at ¶ 148.

46 Id. at ¶ 6 (The Commission's goals in this number optimization proceeding include, among other things, "impos[ing] the least societal cost possible, in a competitively neutral manner, while obtaining the highest benefit," and "ensur[ing] that no class of carrier or consumer is unduly favored or disfavored by [its] optimization efforts").

47 Id. at ¶ 168.

As demonstrated below, mandatory participation by CMRS carriers in number pooling is not only unnecessary to achieve the Commission's goal is this proceeding but, in fact, is counterproductive.

As a threshold matter, number pooling provides little benefit when carriers have high utilization thresholds. At this time, the wireless industry has among the highest fill rates within the telecommunications industry.[48] Wireless carriers in the 100 largest MSAs typically can exhaust a 10,000 number NXX block in less than 10 weeks. Assigning a 1000-block every week would have only a *de minimis* effect in delaying NXX code exhaust. Under these circumstances, number pooling is inefficient.

In addition, mandatory wireless number pooling is prohibitively expensive and discriminatory. The Commission's recent determination to forbear from imposing LNP on CMRS carriers was predicated on its concern that such obligations impose excessive costs and limited benefits to consumers.[49] Specifically, the Commission acknowledged that implementing number portability would be a costly diversion of resources that could be better allocated to "other

---

48 See "Number Utilization Forecast and Trends," a report prepared by Lockheed Martin CIS, NANPA, at 8 (Feb. 18, 1999) ("NANPA Utilization Study").

49 As the Commission recently noted, the value of number portability to wireless consumers is overstated: "implementing number portability . . . is likely to have a relatively small positive impact on wireless-to-wireless competition in the near term, because number portability is not a current priority for wireless consumers. . . . The record also yields little evidence that wireless consumers identify the ability to retain their telephone number as a major factor in their decision to switch wireless carriers. . . . Further, the high churn rates associated with wireless carriers suggest that the lack of wireless number portability currently is not a barrier to customers switching wireless carriers." Cellular Telecommunications Industry Association's Petition for Forbearance From Commercial Mobile Radio Services Number Portability Obligations and Telephone Number Portability, *Memorandum Opinion and Order*, WT Docket No. 98-229; CC Docket No. 95-116, 14 FCC Rcd 3092, ¶ 34 (1999) ("Number Portability Forbearance Order")(citations omitted).

initiatives that could have a more immediate impact on competition, such as network buildout."[50] That is, forbearing from number portability furthers the public interest because it gives "CMRS carriers greater flexibility . . . to complete network buildout, technical upgrades, and other improvements that are likely to have a more immediate impact on enhancing service to the public and promoting competition in the telecommunications marketplace."[51]

These findings hold true in the context of number optimization. Consumer welfare is better served by carriers' continued devotion of their resources to genuine priorities such as network buildout[52] rather than premature implementation of number portability. Given the availability of alternative, technology-neutral methods of achieving numbering optimization, the Commission should reject proposals to extend number pooling to CMRS carriers as long as CMRS carriers are efficient in their utilization of numbering resources in jeopardy markets. Thus,

---

50 Id. at ¶ 38. In the Telecommunications Act of 1996, Congress determined that the inability to retain one's telephone number when switching carriers presents an impediment to competition that warranted the requirement that LECs deploy number portability technology in wireline networks. See 47 U.S.C. § 251(b)(2); H.R. Rep. No. 104-204, pt. 1, at 72 (1995) ("The ability to change service providers is only meaningful if a customer can retain his or her local telephone number."). Congress explicitly excluded CMRS providers from the requirement that they offer number portability. See Telephone Number Portability, CC Docket No. 95-116, *First Report and Order and Further Notice of Proposed Rulemaking*, 11 FCC Rcd 8352, ¶ 152 (1996).

51 Number Portability Forbearance Order at ¶ 25.

52 See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993: Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, *Fourth Report*, FCC 99-136, B-17 (rel. June 24, 1999) (Table 11 notes the broadband PCS capital expenditures of several carriers between 1995-1998).

the Commission should adhere to its previous determinations to reject any efforts to require CMRS participation in number pooling.[53]

As a technical matter, for LNP -- and therefore number pooling -- to be viable for wireless carriers, every wireless switch must be LNP-capable. Otherwise, nationwide roaming is impossible. Accordingly, it is impracticable to fashion limited or "localized" number pooling requirements for CMRS carriers without impairing wireless consumers' ability to roam.[54] Forcing the entire wireless industry to deploy number portability to support number pooling would place a heavy burden on rural carriers and their customers (who do not generally have number optimization concerns themselves).[55]

Essentially, the benefits associated with wireless participation in number pooling are limited. CTIA's members estimate that of the 19,240 rate centers nationwide, wireless carriers

---

53 Most recently in a decision prohibiting the Pennsylvania Public Utility Commission from implementing number pooling, the Commission made clear that it alone has jurisdiction over the distribution of telephone numbers and that states may not unreasonably discriminate against wireless services by requiring CMRS carriers to participate in number pooling. Pennsylvania Order at ¶¶ 21, 40. CTIA believes that this remains the correct decision.

54 As the Commission noted, "[w]ireless carriers' service areas are not restricted to particular state, area code, or Local Access and Transport Area (LATA) boundaries. Any LNP method developed in one state automatically would impact customers in other states that are in a wireless carrier's service area. Further, carriers with whom wireless carriers have roaming agreements may be unable to honor those agreements if they cannot recognize numbers that have been ported to and from wireless carriers who are applying a localized number portability method in a particular state." Pennsylvania Order at n. 118.

55 Moreover, prior to mandating wireless carrier participation in number pooling, the Commission would have to address weighty issues such as wireless/wireline LNP integration which still remains unresolved. See "2nd Report on Wireless Wireline Integration," North American Numbering Council Local Number Portability Administration Working Group Report, at 28 (June 30, 1999).

have a presence in 2000. Thus, wireless carriers generally obtain all of their NXXs from approximately 10% of the total number of rate centers. Because number pooling is limited to pools within a rate center, wireless carriers would only be able to participate in number pooling in a very small percentage (10%) of rate centers.[56] While number pooling may hold promise for wireline carriers within the 100 largest MSAs where LNP eventually will be deployed, in many of these rate centers, no wireless carrier maintains a presence. That is, in 9 out of 10 rate centers nationwide, wireless carriers are not contributing to inefficient numbering utilization. Imposing costs on the wireless industry in those rate centers by ordering number pooling will have no measurable benefit.

Admittedly, number pooling may be an appropriate numbering resource optimization method for wireline carriers -- especially those carriers with more limited numbering resource needs and with the existing ability to provide number portability. However, the Commission need not require CMRS carrier compliance with number pooling for these beneficial effects to be realized. Simply stated, number pooling does not require universal participation by all telecommunications carriers to optimize numbering resources. In Illinois, within nine months of initiating a number pooling trial in the 847 area code, approximately 137 NXXs were saved. Two voluntary pooling initiatives in New York have also resulted in the return of 36 thousands-blocks in the 212 are code and 21 thousands-blocks in the 718 area code.[57] The success of these trials,

---

[56] It is interesting that this 10% ratio effectively parallels the results that would be achieved by wireline number pooling, in which carriers get numbers in 1,000 instead of 10,000 blocks.

[57] See The State Scene (May/June 1999). The State Scene is a bi-monthly publication of CIS for State PUCs. The May/June edition can be found at <http://www.numberpool.com/state-scene/Newsletter%June-July.htm>.

which relied upon existing LNP architecture --and did not include the participation of wireless carriers -- illustrates that significant efficiencies may be achieved without mandating the participation of CMRS carriers.

B. Given Certain Key Assumptions Made In The NANPA Report, CTIA Questions The Underlying Conclusions Regarding Number Exhaust And The Impact Of Number Pooling.

A critical component in devising a solution to number exhaust is the ability to assess realistically the time to exhaust and the efficacy of given number conservation methods. As noted previously, there are both practical and policy considerations that foreclose the participation of CMRS carriers in number pooling initiatives. Similarly, CTIA believes that certain industry numbering reports overstate the impact on number exhaust that CMRS carrier participation in number pooling would generate. In response to the Commission's request,[58] CTIA comments on two recent submissions by the NANPA.[59] In short, CTIA questions the underlying assumptions and the resulting conclusions made therein.[60]

---

58 Notice at ¶ 165 ("We also seek comment on the projections presented by the NANPA concerning the comparative impact on NANP exhaust depending on whether pooling includes or does not include CMRS participants.")

59 "North American Numbering Plan Exhaust Study," a report submitted by North American Number Plan Administration (NANPA) Lockheed Martin CIS, of Apr. 22, 1999 ("NANPA Exhaust Study"); NANPA Utilization Study.

60 The Commission notes that NANPA specifically "estimates that if thousands-block pooling were implemented in the year 2000 by all wireline, CMRS, and paging carriers, the life of the NANP would be extended until 2051, or even longer if the pooling program included reclamation of existing NXX codes. In an alternative projection, the NANPA estimates that implementation of pooling by wireline carriers alone (i.e., with no CMRS participation) would extend NANP life until 2027." Notice at ¶ 164 (citation omitted).

In a letter to the NANC submitted earlier this year,[61] CTIA along with several other companies reviewed the NANPA Exhaust Study regarding the forecast exhaust of the NANP and the impact of thousands-block number pooling. As a threshold matter, CTIA believes that this NANPA Exhaust Study does not adequately capture the sensitivity of the exhaust model to certain key assumptions. In particular, the most sensitive variables in the model are among the most unpredictable, e.g., the number of new competitors and their presence in rate centers in the future. Employing more realistic industry assumptions, the exhaust forecast is delayed by at least another 10 years. Thus, CTIA questions NANPA's forecasted exhaust between 2006 and 2012 using the NPA Demand Model and between 2005 and 2012 using the CO Code Demand Model,[62] as well as the potential impact on numbering exhaust by the introduction of number pooling.[63]

In addition, the failure of NANPA to consider the effect of other conservation approaches also skews the conclusions reached. These additional conservation approaches may permit further extension of the NANP exhaust date in conjunction with, or as an alternative to, 1000-block pooling.

Listed below are the key assumptions in the NANPA reports that significantly affect the projected dates for the NANP exhaust and the impact of thousands-block number pooling.

- **Number of CMRS Providers/Presence in Rate Centers**: NANPA assumed the entry of as many as 14 CMRS providers by 2009. The exact number is likely overstated and may be closer to 10 or fewer CMRS carriers, depending upon

---

61 Letter from Michael F. Altschul, Vice President and General Counsel, CTIA, to Alan Hasselwander, Chairman, NANC, of Apr. 22, 1999.

62 See NANPA Exhaust Study at 2-1, 3-1.

63 See id. at 4-2 (estimating that if all ILECs, CLECs, CMRS, and paging carriers participate beginning in 2000, the NANP will exhaust in 2094).

several market factors. NANPA also indicated that CMRS providers were in 14% of the rate centers;[64] this number, too, is high.

- The Commission's rules limit the maximum number of CMRS licenses in a market. In each market, there likely will be 2 cellular licenses, 6 PCS licenses, and 1-2 satellite or SMR licenses. This number will likely vary because (1) licensees may hold more than one license in a market, (2) some licenses may go unpurchased in an auction, (3) some markets have less relative ability to support numerous carriers, (4) there is an industry trend toward consolidation, and (5) some wireless handsets have multi-functionality.

- The methodology used to calculate the 14% percentage is questionable. The 14% threshold is simply too high, according to industry numbering experts.

- **Number of CLECs/Presence in Rate Centers**: NANPA assumed that there will be the equivalent of 27 CLECs in 23% of the rate centers (i.e., one equivalent CLEC has 4,386 equivalent CO Codes) by 2010, resulting in an exhaust date of 2008. Because these numbers are the most unpredictable,[65] they are also questionable.

  - To illustrate, NANPA's predictions presumed the full (27) CLEC presence in a rate center if just one CLEC has a presence in that rate center today. This number likely will be lower than 27. While there is no industry consensus as yet of the exact figure, for purposes of illustration, if one assumed instead that there were 20 CLECs in fewer rate centers, the exhaust dates ranged significantly from 2016 to 2023.

- **Inclusion of Paging Carriers in the Pooling Model**: NANPA included paging in the pooling model.[66] Given the exclusion of paging from the FCC's LNP rules, this appears to be an improper assumption.

- **Ubiquitous Deployment**: NANPA assumed that pooling will be deployed everywhere, i.e., ubiquitous deployment. Yet, carriers are not required to implement LNP outside of the top 100 MSAs, nor does pooling appear necessary in non-jeopardy areas.

---

64 Id. at 3-4.

65 Id. at 3-4, 3-16.

66 Id. at 4-2 and note 1.

- **Start Date for Pooling**: NANPA used 2000 as the start date for pooling for all industry segments.[67] Considering (1) the absence of a Commission order establishing year 2000 as the relevant date, and (2) the inability of CMRS carriers to implement pooling by this date, this presumption appears inappropriate.

It is necessary to modify the NANPA Exhaust Study's conclusions consistent with the above criticisms to more accurately calculate the time-frame for exhaust.

V. TECHNOLOGY AND SERVICE SPECIFIC AREA CODES ARE AN INEFFICIENT AND ANTI-COMPETITIVE USE OF NPA ADMINISTRATION AUTHORITY.

The Commission requests comment on whether it should lift the current prohibition on service and technology specific overlays, and whether there may exist numbering resource benefits related to permitting such service or technology specific area code overlays.[68] It suggests these overlays as one of several possible solutions because of the need "to assist states in implementing area code relief in a manner that is consistent" with any optimization procedures that the Commission may adopt in this proceeding.[69]

Service or technology specific area codes are prohibited and have been since the Commission's 1995 decision on Ameritech's area code relief plan, which unfairly burdened and discriminated against CMRS subscribers.[70] The Commission has since upheld the prohibition, reiterating that service or technology specific area codes are "unreasonably discriminatory" and "unduly inhibit competition."[71]

---

67 Id. at 4-2.

68 Notice at ¶ 247.

69 Id. at ¶ 241.

70 Ameritech Order.

71 Notice at ¶ 243; see also Second Report and Order at ¶ 285.

Considering the current crisis in numbering resources, a contemplated change in the Commission's policy at this juncture is unwarranted and unjustified. First, service specific area codes, such as wireless only NPAs, would aggravate, rather than alleviate, inefficient use of numbering resources. Second, service or technology specific area codes remain discriminatory and anticompetitive measures that must continue to be prohibited.

A. Granting States Authority To Implement Wireless-Only Area Codes Would Thwart The Commission's Number Conservation Efforts.

The purpose of this proceeding is to establish mechanisms for the efficient use of numbering resources and to resolve the crisis that inefficient usage has created. Permitting states to grant service or technology specific area codes, however, would prevent rather than promote efficient utilization. First, granting such authority to states could cause an immediate demand for already scarce NPA codes. Second, the creation of service or technology specific area codes would exacerbate the numbering exhaust problem that the Commission seeks to remedy, while simultaneously stranding millions of telephone numbers in such service specific area codes. CTIA, therefore, shares the Commission's concern that technology or service specific overlays "might decrease, rather than increase, the efficiency with which numbering resources are used."[72]

Allowing states to adopt service specific area codes would almost certainly lead to an increase in the amount of stranded telephone numbers and the pace at which area codes are exhausted. To illustrate, if the Commission permitted states to establish wireless only area codes, then predictably each state could adopt at least one wireless only area code, thereby placing possibly fifty new area codes into immediate use. With approximately 7.5 million numbers in each

---

[72] Notice at ¶ 259.

area code, the result could be an immediate allocation of 375 million service specific numbers -- more than one for every person in the nation. Conversely, there currently exist 75 million CMRS subscribers. Even if all 75 million subscribers were transferred to the new wireless area codes, hundreds of millions of telephone numbers would be stranded in these new area codes. Such a massive stranding of numbers directly contradicts one of the express purposes of this proceeding, which is to "make more efficient use of numbering resources. . . ."[73]

Such concerns are not merely hypothetical. At present, at least three states -- Connecticut, California and Massachusetts -- have requested authority from the Commission to implement wireless only area code overlays. Consider, for example, the practical consequences of permitting Connecticut to adopt a wireless only area code. Connecticut would have approximately 7.5 million telephone numbers that could be used *only* for wireless services. Given the overall state population of approximately 3,274,000 people,[74] Connecticut would have more than two wireless telephone numbers for every man, woman and child in the state. This result produces nothing more than a gross waste of a scarce resource. Even if, at some point in the future, every Connecticut resident required two or more wireless telephone numbers, in the interim millions of numbers would be stranded in the wireless only area code while other area codes continued to exhaust. If Connecticut adopted additional service or technology specific area codes, such as a CLEC only area code, the millions of stranded numbers would multiply at an astronomical rate. No state could accurately predict whether any one type of competitive service

---

73 Id. at ¶ 21.

74 Census Bureau, State Population Estimates and Demographic Components of Population Change: July 1, 1997 to July 1, 1998, (visited July 7, 1999), <http://www.census.gov/population/estimates/state/st-98-1.txt>.

would be successful enough to exhaust its own area code, making the adoption of any such area code a gamble with a resource that the public can ill afford to lose.

Furthermore, the additional granting of new, service specific area codes would dramatically accelerate the exhaustion of the NANP, yet again contradicting one of the primary purposes of this proceeding. As the Commission noted, "the rapid increase in area code consumption throughout the country may lead to the creation of approximately 68 new area codes by the year 2000."[75] This estimate does not account for the increased demand for area codes that likely would be created by permitting states to adopt service or technology specific area codes. Allowing the creation of service or technology specific area codes, therefore, would directly contravene the Commission's overriding goal -- to maximize efficient number utilization within area codes, thereby reducing the need for new area codes and ultimately preventing the premature exhaust of the NANP.[76]

New York City's 917 area code provides a prime example of the inefficiencies that service specific area codes would produce. In 1990, the New York Public Service Commission ("NYPSC") instituted a proceeding to create an area code overlay, the 917 NPA, in an effort to relieve the predicted exhaustion of numbers in New York City.[77] Over the course of the proceeding, New York City and other parties proposed that the 917 NPA be service specific,

---

75 Notice at ¶ 241.

76 Id.

77 New York Public Service Commission, Proceeding on Motion of the Commission Pursuant to Section 97(2) of the Public Service Law Concerning the Supply of Telephone Numbers Available to New York Telephone Company in New York City, *Order Approving Stipulation*, 90-C-0347, at 2-3 (Nov. 15, 1990).

assigned *only* to paging and cellular subscribers.[78] Bellcore, the administrator of the NANP at that time, strongly disapproved of the wireless only plan. Bellcore expressed its concern that permitting a wireless only area code in New York City would prompt other paging and cellular customers to "request additional, already scarce area codes and objected strenuously to the use of an area code solely for those services."[79]

As early as 1991, Bellcore foresaw the inherent dangers and inefficiencies of permitting states to adopt service specific area codes. Bellcore feared that every state would demand its own wireless only area code, thereby quickly stranding millions of telephone numbers and accelerating the exhaustion of NPAs. The NYPSC believed that these concerns were valid, as a result, the new 917 overlay was implemented as a "primarily" wireless area code that also included a "not insignificant" amount of wireline telephone service numbers.[80]

Despite the NYPSC's intent to prolong the availability of the 212 and 718 NPAs through a primarily wireless area code, New York City area codes continued to exhaust on a much faster than anticipated basis. In December 1997, the NYPSC elected to create another overlay -- the 646 NPA -- in a further attempt to alleviate New York City's number shortage.[81] The 646 NPA, however, is a service transparent overlay available to all New York City service providers. At the

---

78 Id. at 3-4.

79 Id. at 6.

80 Id.

81 New York Public Service Commission, Proceeding on Motion of the Commission, Pursuant to Section 97(2) of the Public Service Law, to Evaluate the Options for Making Additional Central Office and/or Area Codes Available in the 212 and 917 Area Codes of New York City, *Opinion and Order* (Dec. 10, 1997) ("1997 Order").

same time, the NYPSC opened the 917 NPA to all wireline carriers, not just those originally specified in 1991, as an additional means of efficiently using the current NPAs.[82] Almost immediately after it was opened to all carriers, the 917 code went into jeopardy.

Finally, earlier this year, the NYPSC issued an order in response to a Petition from wireless service providers, granting the providers' request to have the "same access to 718 NXX codes that wireline carriers currently enjoy."[83] The New York Commission concluded that "[s]ince access has recently been granted to wireline carriers in the 917 NPA . . . wireless carriers should be granted reciprocal access to the 718 NPA."[84] Events in New York demonstrate that the most efficient use of already scarce numbering resources mandated the desegregation of primarily service specific area codes. By allowing any carrier to request numbers from any of the three New York City area codes, the NYPSC better utilized the 212, 718 and 917 NPAs prior to implementing the new, service transparent 646 area code.

The New York City numbering crisis teaches a valuable lesson. The Commission should recognize that limiting NPAs to one specific service or technology serves only to strand numbers in such NPAs while other area codes may continue to exhaust at alarming rates. By abandoning consideration of service or technology specific area codes and maintaining its existing policy, the

---

82 See id.; see also New York Public Service Commission, Joint Petition of Nextel Communications of Mid-Atlantic, Inc., Cellco Partnership d/b/a Bell Atlantic Mobile, Omnipoint Communications, Inc., Cellular Systems, Inc. d/b/a AT&T Wireless Services and AT&T Communications of New York, Inc. to Amend the Commission's Orders Issued July 1, 1991 in Case 90-C-0347 and December 10, 1997 in Case 96-C-1158, *Order*, 1999 N.Y. PUC LEXIS 73 (Feb. 3, 1999) (noting that the 1997 Order granted wireline providers access to the 917 NPA) ("Nextel Order").

83 Nextel Order at *2.

84 Id.

Commission would be promoting efficient exhaustion of one area code at a time, in contrast with a plan that would allow states to create new NPAs where millions of numbers languish in service or technology specific area codes.

Finally, the Commission should not allow states to adopt service or technology specific area codes as a means of implementing CPP.[85] Dedicating NPAs for a specific wireless service such as CPP, like dedicating NPA for wireless services generally, is inconsistent with the efficiency gains the Commission hopes to achieve through this proceeding. Moreover, the Commission has only recently begun to seriously consider CPP regulatory issues.[86] Comprehensive treatment of the issues surrounding CPP implementation, such as the development of a uniform notification method for CPP calls (including the use of distinctive numbers), are better dealt with in that proceeding.

B. The Commission Should Maintain Its Prohibition Of Technology/Service Specific Area Codes Because They Are Discriminatory.

Service or technology specific area codes are discriminatory and the Commission should reaffirm its prohibition of these area codes. Wireless only area codes, in particular, discriminate between wireless and wireline service providers and are contrary to one of the overarching principles expressed in the Telecommunications Act of 1996 -- promotion of competition in the communications market. Furthermore, service or technology specific area codes are incompatible with the Commission's previous determinations on this matter. To now allow service specific area

---

85 See Notice at ¶ 257 (inquiring as to the benefits of service specific area codes for CPP).

86 Calling Party Pays Service Offering in the Commercial Mobile Radio Services, *Declaratory Ruling and Notice of Proposed Rulemaking*, WT Docket No. 97-207, FCC No. 99-137 (rel. July 7, 1999).

codes would constitute reconsideration of the Commission's 1995 decision to prohibit discriminatory numbering administration, without any basis for doing so. The Commission should act decisively in this proceeding and once again prohibit numbering plans that discriminate against CMRS providers, or any other industry sector. The Commission must continue to promote a competitive market, and mandate that access to telephone numbers not be used as an anti-competitive and discriminatory tool.

In 1995, the Commission relied upon Sections 201(b) and 202(a) to prohibit unreasonably discriminatory numbering administration.[87] In the Ameritech Order, the Commission recognized the competitive significance of non-discriminatory numbering administration and rejected Ameritech's numbering administration proposal to implement a service specific area code. The Commission reasoned that Ameritech's proposal to exclude consumers of wireless services from an existing NPA and to segregate them into a separate NPA "would confer a significant competitive advantage on the wireline companies in competition with paging and cellular companies, and, in particular, Ameritech itself."[88] In addition, the Commission balanced the disadvantages that wireless carriers would have faced with the need for numbering relief and concluded that "Ameritech has not shown that other plans that do not have unreasonably discriminatory impacts could not also equally meet the needs for additional numbering resources."[89]

---

87 Ameritech Order at ¶¶ 13, 20 ("[W]e note that under Title II, a carrier may not discriminate unreasonably in its 'charges, practices, classifications, regulations, facilities, or services.' . . . We find that Ameritech's proposed numbering plan would unreasonably discriminate. . . .") (quoting 47 U.S.C. § 202(a)).

88 Id. at ¶ 27.

89 Id. at ¶ 28.

Since the Ameritech Order, the Commission has had the opportunity to revisit its decision and has reaffirmed the importance of administering telephone numbers in a non-discriminatory manner. Pursuant to Section 251, which grants the Commission further authority over numbering administration, the Commission established that numbering administration should "not unduly favor or disadvantage any particular industry segment or group of consumers . . . [or] unduly favor one technology over another."[90] As recently as 1998, the Commission reiterated the importance of implementing number conservation methods that also promote a competitive market.[91] In that decision, the Commission criticized the Pennsylvania Public Utilities Commission for adopting a number conservation plan that discriminated against wireless carriers by making numbering resources available only to those carriers that could participate in number pooling. The Commission clarified the Pennsylvania Commission's limited authority over area code conservation, and reminded it that "[f]or competition to continue to develop, all carriers must have access to numbering resources."[92]

In these decisions, the Commission established the overriding principle that should continue to govern numbering administration -- technology neutral assignment of telephone

---

90 Second Report and Order at ¶ 281; see also Pennsylvania Order at ¶ 31 (holding that the FCC would consider delegating authority to states to use number conservation methods if the method would both "slow the pace of area code relief" and not result in "anticompetitive consequences.").

91 See Pennsylvania Order at ¶ 37.

92 Pennsylvania Order at ¶ 38 (emphasis added).

numbers is a prerequisite to competition.[93] The conclusions that the Commission reached in the Ameritech Order still hold true in today's developing market:

> [s]uccessful administration of the NANP should seek to accommodate new telecommunications services and providers by making numbering resources available in a way that does not unduly favor one industry segment or technology and by making numbering resources available on an efficient, timely basis. We believe that assignment of numbers based on whether the carrier provides wireless service is not consistent with these objectives and could hinder the growth and provision of new beneficial services to consumers.[94]

Some states have attempted to challenge these findings by petitioning the Commission for authority to implement service or technology specific area codes. For example, in 1998 and 1999 Connecticut and Massachusetts separately filed petitions with the Commission requesting a waiver of the Commission's prohibition on service or technology specific area codes.[95] The Connecticut Department of Public Utility Control ("CDPUC") petition argues that the Commission's prohibition "should only occur when it has been determined that competition exists between telecommunications industries. . . ."[96] The CDPUC concludes that lack of competition between the wireless and wireline industries indicates that a service or technology specific area code would

---

93 See Ameritech Order at ¶ 29.

94 Id. (emphasis added).

95 Petition of the Connecticut Department of Public Utility Control for Amendment to Rulemaking, Rm. No. 9258, DA 98-743 (Mar. 30, 1998) ("Connecticut Petition"); Massachusetts Department of Telecommunications and Energy Petition for Waiver to Implement a Technology Specific Overlay and Request for Additional Authority to Implement Various Area Code Conservation Methods in the 508, 617, 781, and 978 Area Codes, NSD File No. L-99-17 (Mar. 4, 1999).

96 Connecticut Petition at 5.

not "delay or hinder" the development of competition and the Commission, therefore, should permit the CDPUC to implement a statewide, wireless only area code.[97]

Commission reconsideration of its prohibition on service or technology specific area codes, however, is unwarranted. The CDPUC's arguments in support of reconsideration are circular and short-sighted. The CDPUC asserts that because no competition currently exists, there remains no reason to preserve the existing framework for future competition. Regardless of the merits of the CDPUC's marketplace assertions, adoption of the CDPUC's rationale would serve only to stunt the growth of competition between the industries. Discriminatory, service specific area codes that expressly exclude wireless carriers unduly burden the carriers' ability to offer service and to compete directly with wireline carriers. For competition to continue to emerge, the Commission must continue to promote an environment in which carriers offering comparable services can maintain the capability to compete with one another.

Furthermore, the Commission's decision in the Ameritech Order and in subsequent proceedings was not based on the conclusion that CMRS services were competitors to local exchange service.[98] Service and technology specific area codes are discriminatory and create an anticompetitive environment regardless of whether competition exists between the wireless and wireline industries. The founding principle for the Commission's policy is that all carriers -- including CMRS providers -- have a statutory right to non-discriminatory access to telephone

---

97 Id. at 11.

98 See Second Report and Order at ¶ 285 (finding that "[e]xclusion and segregation were specific elements of Ameritech's proposed plan, each of which the Commission held violated the Communications Act of 1934").

numbers.[99] To ensure that specific service providers are not discriminated against and a competitive market continues to evolve, the Commission must reaffirm its prohibition on service or technology specific area codes.

---

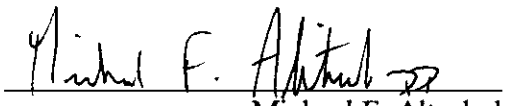
[99] See 47 U.S.C. § 251(e)(1).

VI. CONCLUSION

For these reasons, CTIA respectfully requests that the Commission adopt utilization thresholds and other technology-neutral numbering resource optimization measures consistent with the proposals made in these Comments.

Respectfully submitted,

CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION



Michael F. Altschul
Vice President, General Counsel

Randall S. Coleman
Vice President for
Regulatory Policy and Law

Lolita D. Smith
Staff Counsel

1250 Connecticut Avenue, N.W.
Suite 800
Washington, D.C. 20036
(202) 785-0081

Its Attorneys

July 30, 1999